

EPC-CDD

**Fanless Intel® Atom™ Cedar Trail Tiny Box PC with
Intel® D2550 + NM10 Chipset**

Quick Reference Guide

1st Ed – 19 February 2013

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1. Getting Started

1.1 Safety Precautions

Warning!



Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

Caution!



Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.

1.2 Packing List

Before you begin installing your single board, please make sure that the following materials have been shipped:

- 1 x EPC-CDD Fanless Intel® Atom™ Cedar Trail Tiny Box PC with Intel® D2550 + NM10 Chipset
- 1 x Quick Reference Guide
- 1 x DVD-ROM contains the followings:
 - User's Manual (this manual in PDF file)
 - Ethernet driver and utilities
 - VGA drivers and utilities
 - Audio drivers and utilities
 - WiFi drivers and utilities
 - Chipset drivers and utilities
 - CIR drivers and utilities
- Other major components include the followings:
 - Adapter X 1
 - Antenna X 1
 - Wall mount X 1
 - Power cord X 1
 - Screws



If any of the above items is damaged or missing, contact your retailer.

1.3 System Specifications

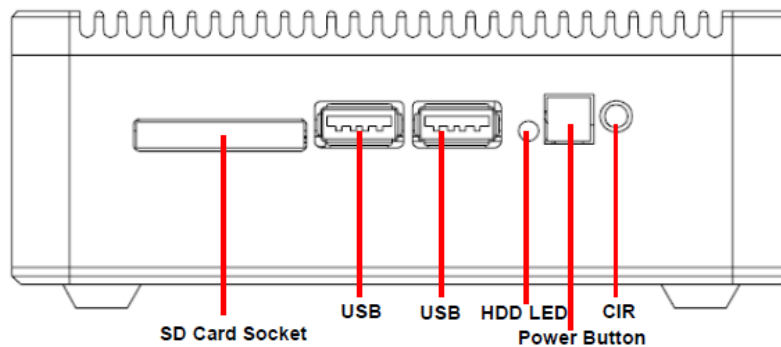
Specifications	
System	
CPU	Onboard Intel® Atom™ Processor D2550 (1M Cache, 1.86 GHz)
BIOS	AMI 16MBit SPI BIOS
System Chipset	Intel® NM10
I/O Chip	Nuvoton NCT5577D
System Memory	One 204-pin DDR3 1066/1333MHZ SO-DIMM socket, supports up to 4GB Max
Storage	Support 2.5" Drive Bay
Watchdog Timer	Reset: 1sec. ~ 65535sec./min. and 1sec. or 1min./step
H/W Status Monitor	Monitoring temperature, voltage, and cooling fan status. Auto throttling control when CPU overheats
Expansion	1x Mini PCI-e socket *Mini PCI-e and m-SATA switch through Jumper
External I/O	
USB port	3 x USB 2.0/1.1 Type A connectors
COM port	1 x RS-232 port (Pin 9 without power)
LAN port	1 x RJ45
VGA port	1 x VGA
HDMI port	1 x HDMI
SD card	1 x SD/SDHC card socket
Audio port	Line-in , Mic-in
DC Jack	1 x DC Jack 2.5mm
WiFi	1 x Antenna & 802.11 b/g/n WiFi card
Others	1 x Power on/off with Power LED button 1 x HDD LED 1 x CIR
Display	
Chipset	Integrated Intel® Graphics Media Accelerator
Resolution	VGA /HDMI Display: 1920 x1200
Dual Display	VGA+HDMI
Audio	
Audio Codec	Realtek ALC661 HD Audio Decoding controller
Audio Interface	Mic-in ,Line out
Ethernet	
LAN Chip	1x Realtek RT8111E PCIe Gigabit Ethernet
Ethernet Interface	10 /100 /1000 Base-Tx Gigabit Ethernet

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SIM card	
SIM card	1x SIM Card socket (Internal)
SD card socket	
SD card socket	Realtek RTS5138 USB card reader controller support SD/SDHC card
Environment &Mechanical	
Power Type	12V 5A 60W adapter
Operating Temp.	0 ~ 40°C (32 ~ 140°F) (w/HDD), Ambient w/Air Flow
Storage Temp	-40 ~ 75°C (-40 ~ 167°F)
Operating Humidity	0 ~ 90% Relative Humidity, Non-condensing
Size (L x W)	5.3" x 5" x 1.81" (135mm x 128mm x 46mm)
Weight	1.9bls (0.86Kgs)

1.4 System Overview

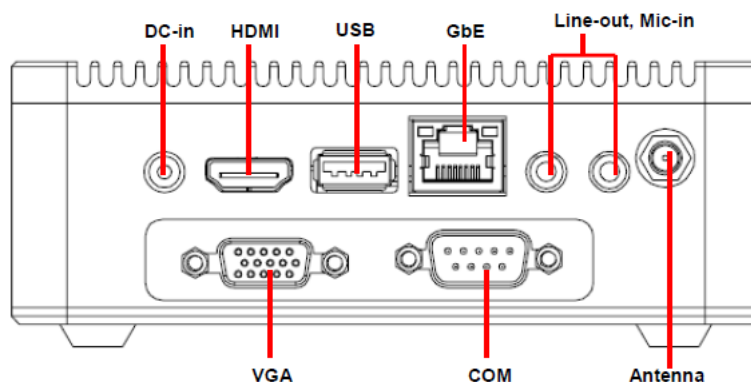
1.4.1 Front View



Connectors

Label	Function	Note
Power Button	Power on button	
HDD LED	HDD LED indicator	
CIR	Consumer IR	
USB	2 X USB 2.0 Type A connectors	
SD Card Socket	SD/MS/MMC socket	

1.4.2 Rear View

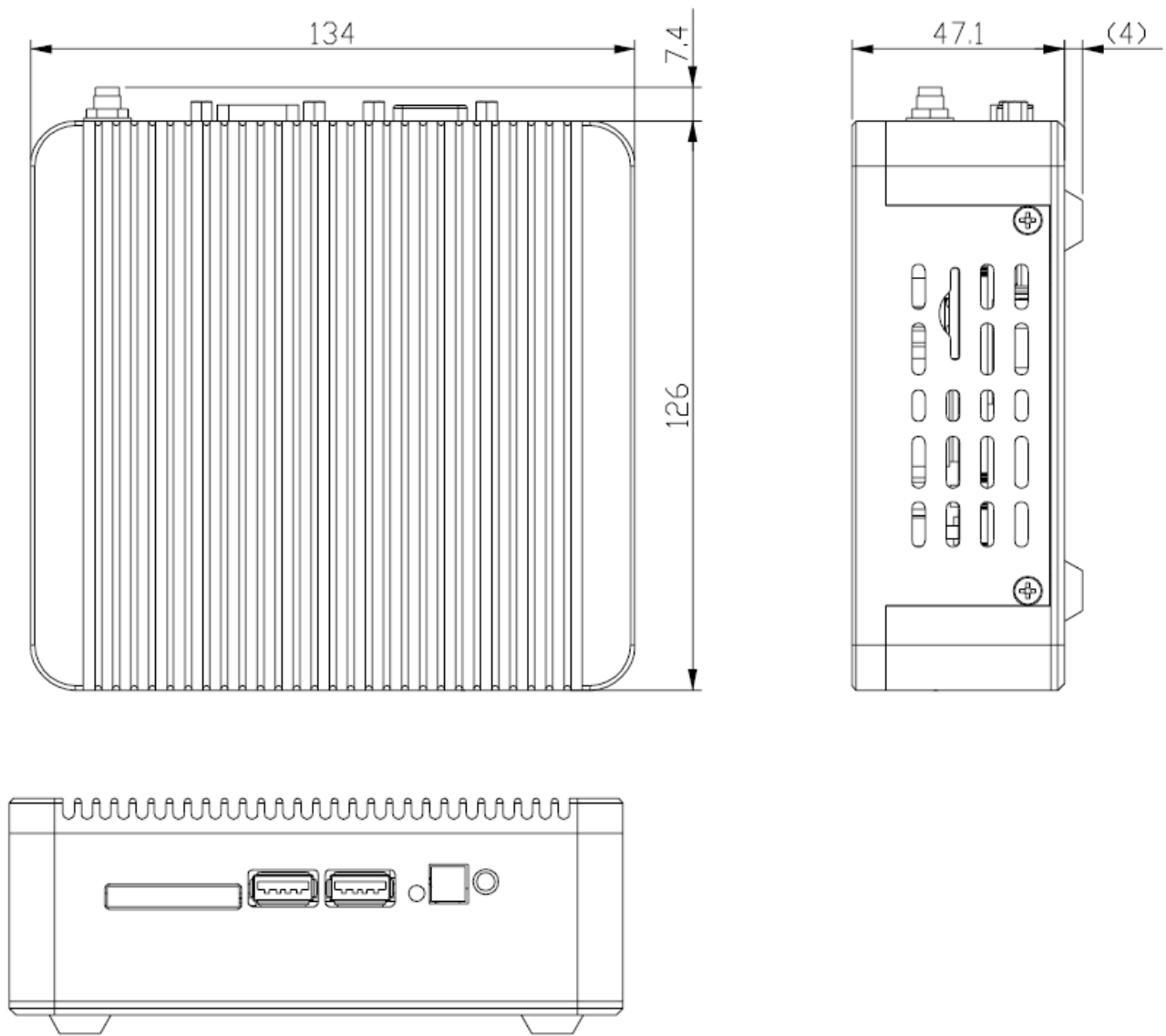


Connectors

Label	Function	Note
COM	Serial port connector	DB-9 male connector
DC-in	DC power-in connector	
HDMI	HDMI connector	
Line-out	Line-out jack	
Mic-in	Microphone-in audio jack	
GbE	LAN port	
USB	USB 2.0 Type A connector	
VGA	VGA connector	D-sub 15-pin, female
Antenna	Dipole	

1.5 System Dimensions

1.5.1 Front & Top view



(Unit: mm)

2. Hardware Configuration

Jumper and Connector Setting, Driver and BIOS Installing

Please refer to ENX-CDD Quick Installation Guide or User's Manual for advanced information.



Note: If you need more information, please visit our website:

<http://www.avalue.com.tw>

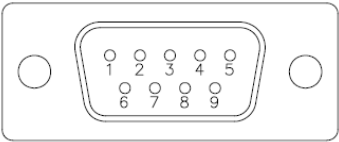
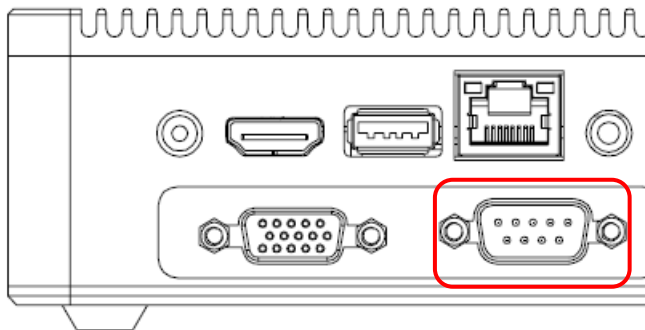
2.1 EPC-CDD connector list

Connectors

Label	Function	Note
Power Button	Power on button	
HDD LED	HDD LED indicator	
CIR	Consumer IR	
USB	3 X USB 2.0 Type A connectors	
SD Card Socket	SD/MS/MMC socket	
COM	Serial port connector	DB-9 male connector
DC-in	DC power-in connector	
HDMI	HDMI connector	
Line-out	Line-out audio jack	
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GbE	LAN port	
VGA	VGA connector	D-sub 15-pin, female
Antenna	Dipole	

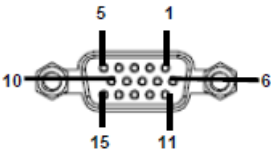
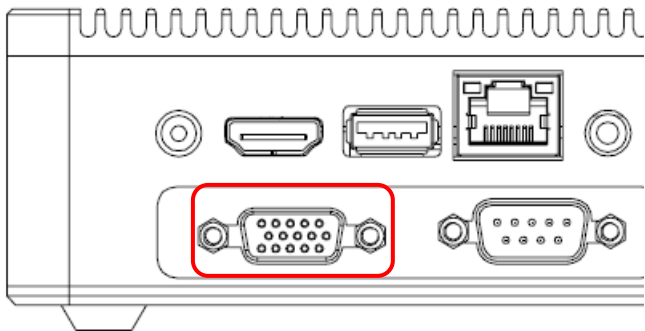
2.2 EPC-CDD connector mapping

2.2.1 Serial port connector (COM)



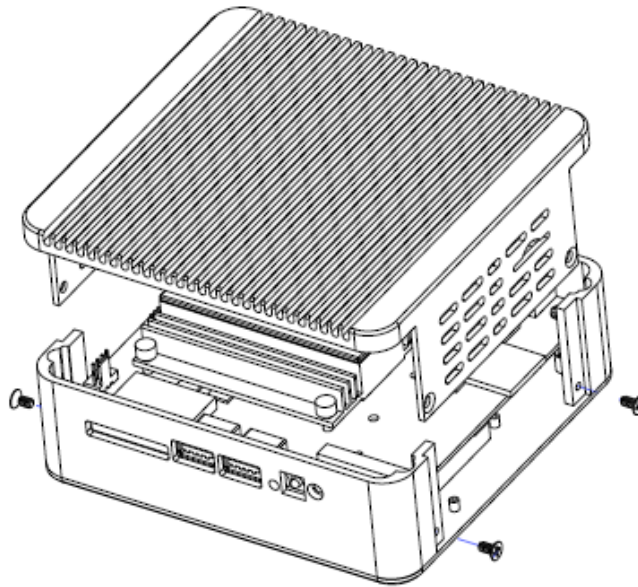
Signal	PIN	PIN	Signal
DCD	1	2	RXD
TXD	3	4	DTR
GND	5	6	DSR
RTS	7	8	CTS
RI	9		

2.2.2 VGA connector (VGA)

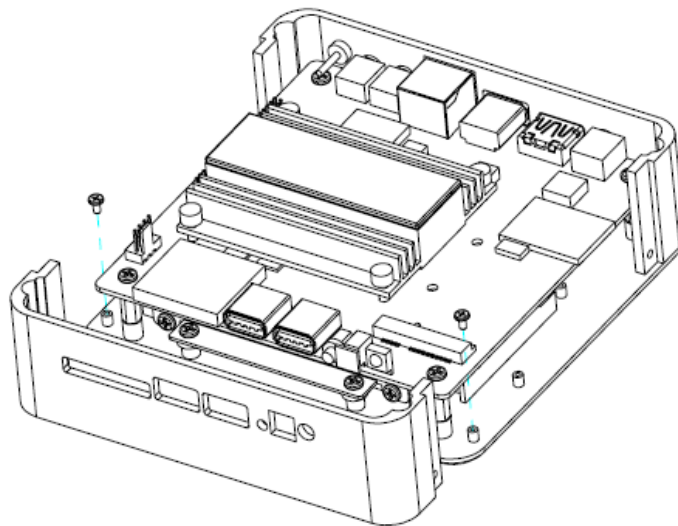


PIN	Signal	PIN	Signal	PIN	Signal
1	R	6	GND	11	NC
2	G	7	GND	12	DATA
3	B	8	GND	13	HSYNC
4	NC	9	NC	14	VSYNC
5	NC	10	NC	15	CLK

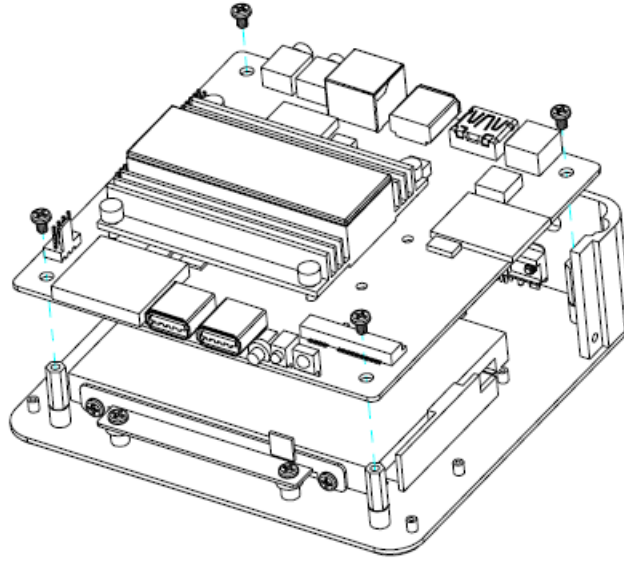
2.3 Installing Hard Disk, Memory & WiFi



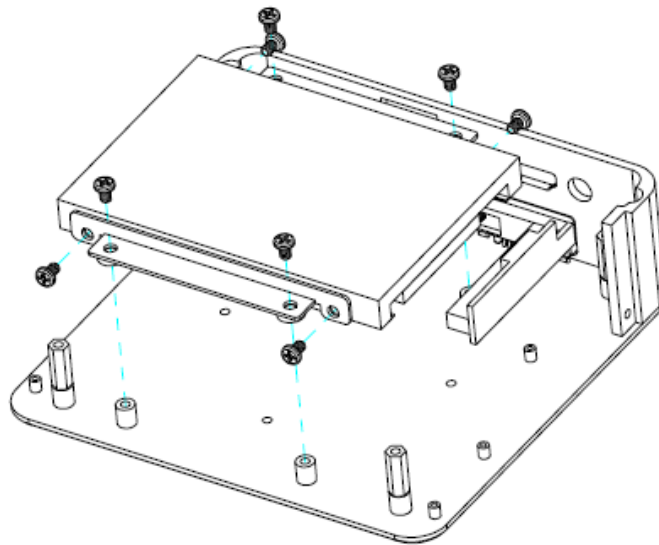
Step 1. Remove 4 screws from two sides of your system, before you can remove the top chassis.



Step 2. Remove 2 screws from the bottom side to unlock front chassis.

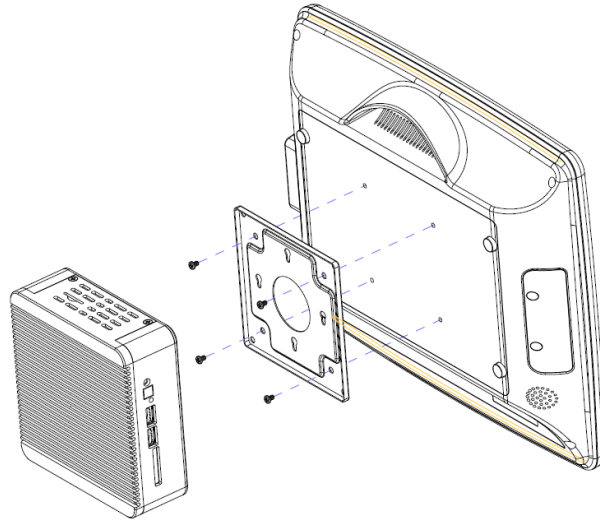


Step 3. Remove 4 screws retaining the main board to uncover HDD, Memory and Wi-Fi location.

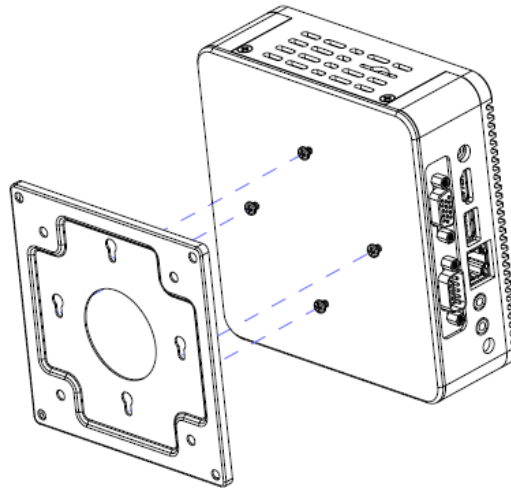


Step 4. Secure HDD by means of 8 screws as shown above.

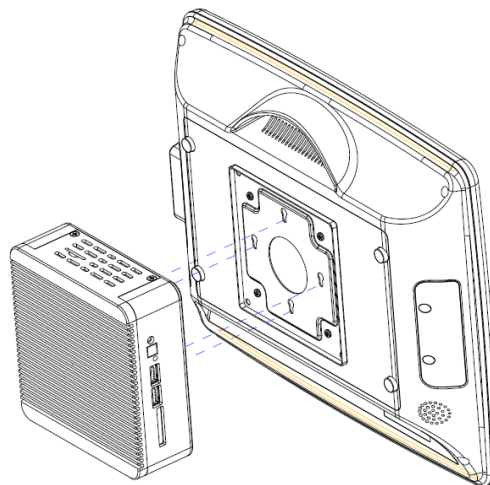
2.4 Use VESA mounting to attach Box PC to Monitor



Step 1. Attach mounting adapter to your monitor VESA holes and fasten 4 screws to secure.



Step 2. Your Box PC is provided with 4 tiny hooks matching the surface of the adapter



Step 3. Adhere Box PC to monitor by matching the hooks to the holes on the adapter.

